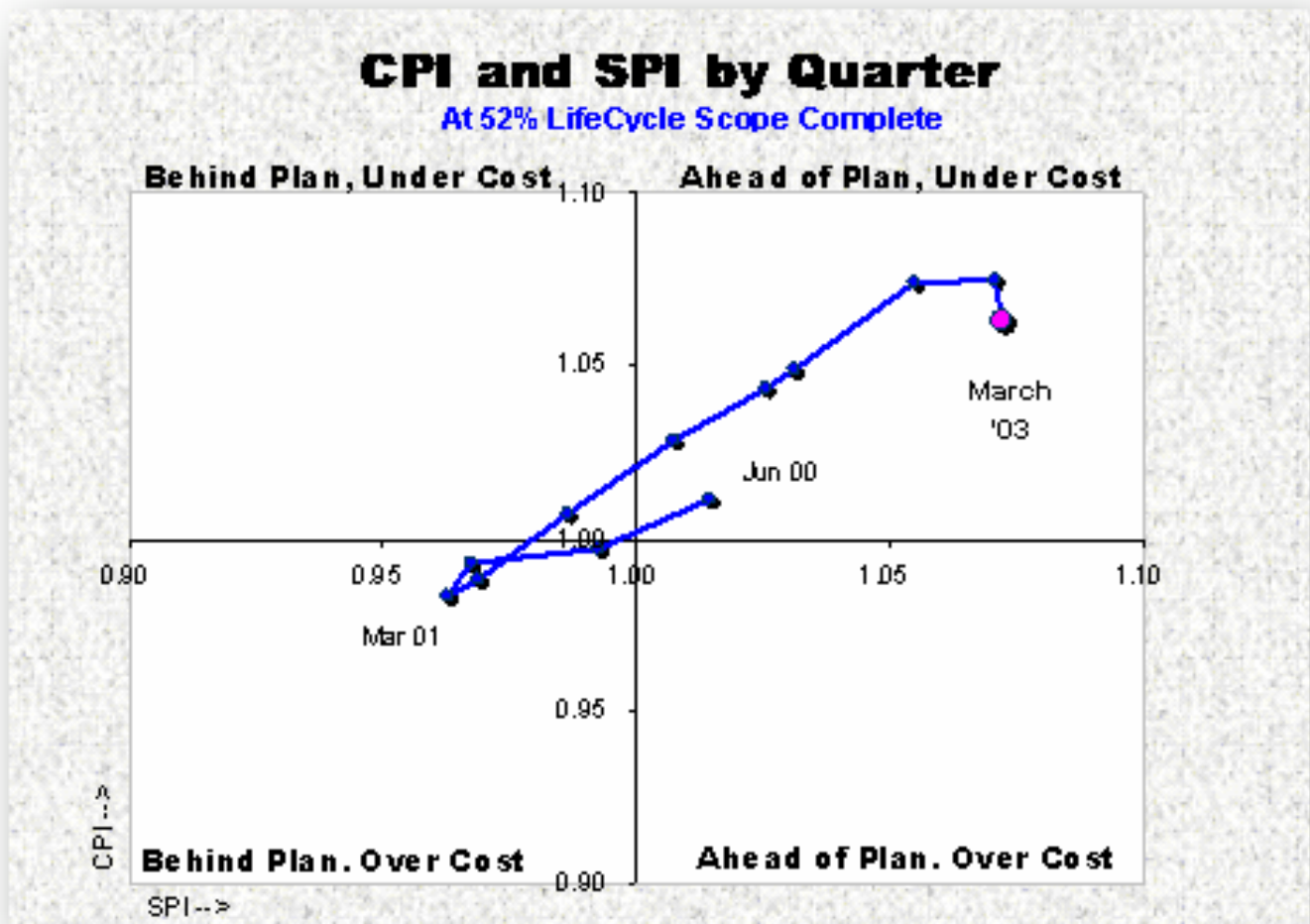


# RFFO RFETS

# Total Project Report

2<sup>nd</sup> Quarter, FY03

January - March, 2003



# Total Project Report RFFO RFETS

2QFY02 • Jan - Mar 2003

## Table of Contents

<b>EXECUTIVE OVERVIEW</b>	<b>1</b>
<b>EXECUTIVE SUMMARY</b>	<b>1</b>
Contract Status .....	1
Fee Payments .....	1
Penalty Assessment .....	1
Requests for Equitable Adjustments (REAs): .....	1
Pending REA's: ~ \$35M +- .....	1
Safety .....	1
GFS/I Performance .....	1
Cost .....	2
Schedule .....	3
Key Milestones .....	4
Additional REA Information .....	4
Potential REA's .....	4
KH Project Risk Report .....	4
<b>DETAILED OVERVIEW</b>	<b>1</b>
SAFETY .....	2
B.6 Safety Analysis .....	2
PBD A 371 COMPLEX .....	4
PBD B 707 COMPLEX .....	5
PBD C 771 COMPLEX .....	5
PBD C 771 COMPLEX .....	6
PBD D 776/7 COMPLEX .....	7
PBD E INDUSTRIAL / SITE SERVICES .....	8
PBD F MATERIAL STEWARDSHIP .....	9
PBD G REMEDIATION .....	10
PBD H ENGINEERING, ENVIRONMENTAL, SAFETY, HEALTH & QUALITY .....	11
PBD J SUPPORT PROJECT .....	12
ROCKY FLATS FIELD OFFICE .....	13
RFFO Budget .....	13
APPENDIX A .....	A
SNM Shipping .....	A
APPENDIX B .....	B
Orphan Wastes .....	B
APPENDIX C .....	C
Cost Variance Trending .....	C
Quarterly CV .....	C
Monthly CV .....	C
APPENDIX D .....	D
Other Schedule Performance Indicators .....	D
Traditional Schedule Variance .....	D
Modified Milestone Schedule Variance .....	D
P3 Completion .....	D
Comparative Schedule Metrics .....	D
<b>PROJECT METRICS</b>	<b>E</b>
KEY DEFINITIONS / TERMS .....	F

# Total Project Report RFFO RFETS

2QFY02 • Jan - Mar 2003

## Executive Overview

**In General:** K-H has completed work activities below the estimated cost and ahead of schedule for the previous sixteen months and the project is now more than 50% complete. A slight drop in the positive cost variance is offset by gains in schedule variance. K-H continues its emphasis on working safely and maintaining compliance with procedures to ensure safe operations.

**Key Accomplishments:** SNM operations had a successful quarter that included improved PuSPS production rates, completion of composite size-reduction activities, and continued shipments of Pu metals and oxides offsite. D&D activities remain on or ahead of schedule with work progressing in the nuclear buildings and on the south side of the Industrial Area. Thirty-six structures and facilities including tanks, pads, small buildings, tents and storage sheds and parts of the Sanitary Landfill were demolished during the quarter. The Waste program continued to accelerate shipping of Low Level (~9,000 m<sup>3</sup>), Low Level Mixed (~6,000m<sup>3</sup>), and TRU Waste (~900m<sup>3</sup>). The Environmental Remediation program completed excavation, sampling, and backfill activities for 55 cells at the 903 Pad Project, field characterization for all the IHSSs surrounding B771/774, and finished the B993 slab removal.

*\*See Glossary*

METRIC	
<b>Safety:</b>	There were no Site Noncompliance Tracking Reports submitted this quarter (nor last quarter). There were 9 Level 3 events, but no events of Level of Concern 4 or 5.
<b>Bears Watching</b>	
<b>Cost:</b>	<b>Cumulative Cost Variance</b> = +6%, +\$122M out of ~\$2,052M BCWP <sub>CUM</sub> <i>LIFECYCLE: 52% of target scope completed; 48% of target cost expended - continues positive performance.</i>
<b>On Plan</b>	
<b>Schedule:</b>	<b>Predetermined Work Activities SV</b> = +44%, +\$76M <i>LIFECYCLE: 15% of scope scheduled; 22% of scope completed</i> <b>Traditional Schedule Variance</b> = +7%, +\$138M <i>LIFECYCLE: 48% of scope scheduled; 52% of scope completed - continues positive performance.</i>
<b>On Plan</b>	
<b>Critical Path</b>	<b>CP</b> = <u>SNM activities, B371 D&amp;D</u> <b>Estimated Completion Date:</b> <u>December 15, 2006</u> The fundamental critical path has remained stable for many months. The contractor continues to examine critical path activities for acceleration opportunities. RFFO is continuing to use the original Target Date, December 15, 2006, as the ECD.
<b>Completion Date: On Plan</b>	
<b>Current CP: On Plan</b> <i>Under Review</i>	
<b>Key Milestones</b>	<b>Closure Activities:</b> Demolished buildings 441 (former lab and office building), 112 (former cafeteria and office space), 885 (waste storage metal building), and tents 10 & 11 (stored legacy waste). Several other small buildings, trailers and other structures were removed/demolished during the quarter. ER completed excavation of 24% of the 903 Pad cells, removed the 993 slab and finished field characterization at the 904 Pad.  <b>DNFSB:</b> <i>Pu Metals &amp; Oxides</i> – The current commitment is to complete PuSPS operations by October 2003. Due to improvements in the production rate, PuSPS operations is now estimated to be complete by June 2003. To mitigate further schedule delays, approximately 970 kilograms of low-purity oxides have been authorized for shipment to the Waste Isolation Pilot Plant; repackaging has commenced and is expected to be complete by July 2003.  <b>RFCA FY03 Milestones:</b> <span style="float: right;"><i>RFFO validated</i></span> D&D (\$29.54M): Met for 2003. LLW (\$5.91M): Met for 2003. ER (\$.552M): Met for 2003. TRU (\$.75M): Met for 2003. 2003 M5 Milestone ( <i>See Glossary</i> ) (\$35.312M): Met for 2003.
<b>DNFSB: On Plan</b>	
<b>RFCA: On Plan</b>	
<b>GFS/I</b>	GFS/I requirements are being met and/or are in process except as noted below.  Need DOE receiver site for Low Level Mixed Waste Orphans between 10 and 100 nanocuries/gram.
<b>Status: On Plan</b>	
<b>Forecast: Bears Watching</b>	

## Executive Summary

### Contract Status

**TC:** 3.973B (Original: 3.963)

**TF:** \$340.8M (Original: \$340M)

**TCD:** 15 December 2006

### Fee Payments

As of March 31, 2003, RFFO has made fee payments to K-H of \$82M under the provisions of the Site Closure Contract. The contractor has requested no fee deferrals under this contract.

### Penalty Assessment

No Fee Penalties were issued this Quarter. To date, four fee penalties have been issued under the terms of this contract with total penalties equaling \$510,000.

### Requests for Equitable Adjustments (REAs):

HQ reviewed the proposed settlement for the National Emergency REA and asked for additional information and support. RFFO prepared and sent a comprehensive response to HQ. The PuSPS Moisture measurement REA has been revised to reflect more current costs and changes in cost for implementation since original submission. No REA settlements have been incorporated into the contract this month.

### Pending REA's: ~ \$35M

- ~ \$16.5 million: National Emergency (2002 – 2003 Costs)
- ~ \$13 million: WIPP WAC Part III (projected 2002 - 2005 costs)
- ~ \$2.4 million: PuSPS Moisture measurement
- ~ \$3+ million in these miscellaneous REAs:
  - System Engineers/B371 VSS
  - NTS Waste Acceptance Criteria
  - PuSPS outside SRS Requirement
  - Beryllium Monitoring



### Safety

### 9 Significant (Level-of-Concern 3) Events

The level 3 events included: 1) 903 pad: An employee almost struck by a fork truck; 2) T130E: An employee almost struck by a vehicle; 3) B777: An employee was struck in the head by a piece of metal; 4) B885: a piece of ducting fell onto a lift as a result of unauthorized work; 5) B779 Pad: a person nearly struck by a piece of unsecured plywood in a strong wind; 6) B881: several workers potentially exposed to asbestos discovered after drywall was removed; 7) Steam Plant: boilers shut down after control lines froze; 8) B776 Rm 134 and the step-off pad: ~33 employees exposed to radiation contamination by a flow reversal. 9) B371, Rm 4301: ~ Six employees evacuated and evaluated after an air mover intake hose came loose and spread contamination.



### GFS/I Performance

Most GFS/I requirements have been met. The key issue is the identification of disposal sites for LLMW between 10 and 100 nCi/g activity.



### Critical Path

**ECD:** 15 December 2006

The critical path includes preparation / packaging of special nuclear materials followed by B371 D&D and site grading. The contractor continues to examine logic ties and remaining durations for opportunities to accelerate the estimated Project completion date. RFFO is monitoring the critical path and near critical path activities and for the foreseeable future will continue to utilize December 15, 2006 as the estimated completion date.

# Total Project Report RFFO RFETS

2QFY02 • Jan - Mar 2003



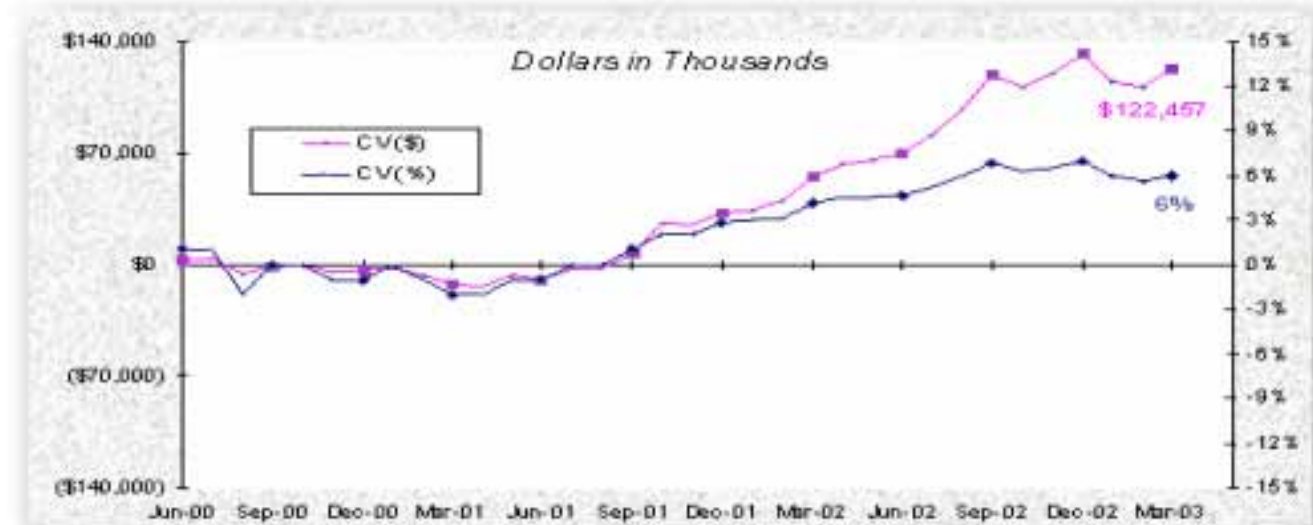
## Cost

Cost Variance +6%, +\$122M

*LIFECYCLE: 52% of scope completed; 48% of target cost expended*

During the second quarter of Fiscal Year 2003 (1QFY03), cost performance declined. Cost Variance for target activities dropped 1%, or about \$9M this quarter (down from +\$131M in December). Cost Variance on the Project remains significantly positive, with over \$122 million in accumulated cost savings to date.

## Cumulative Cost Variance Over Time



**NOTE:** Currently, the closure project has accumulated \$18.2M in non-target Site Closure (EW05) and Safeguards and Security (FS40) costs. These non-target costs are generally the result of technical direction and may eventually be considered as part of potential Requests for Equitable Adjustment, and / or will impact cost variance.

## Cost Performance by PBD:

	Project Description	BCWP	ACWP	CV (\$)	CV (%)
1A	371 Complex Project	\$260,024	\$296,688	(\$36,665)	-14.1%
1B	707 Complex Project	\$155,790	\$156,826	(\$1,036)	-0.7%
1C	B771/774 Closure Project	\$174,495	\$187,766	(\$13,271)	-7.6%
1D	B776/777 Closure Project	\$150,986	\$141,579	\$9,407	6.2%
1E	Industrial and Site Services Project	\$371,090	\$307,455	\$63,635	17.1%
1F	Material Stewardship Project	\$478,176	\$457,437	\$20,739	4.3%
1G	Remediation Project	\$58,157	\$36,246	\$21,911	37.7%
1H	Engr, Environ, Safety & Quality Programs	\$141,031	\$122,747	\$18,284	13.0%
1J	Support Project	\$262,190	\$222,738	\$39,452	15.0%
<b>Project Totals</b>		<b>\$2,051,939</b>	<b>\$1,929,483</b>	<b>\$122,457</b>	<b>6%</b>

Includes all target fund sources: EW05, FS40, EW09, GG08, NN61 and YN01

Positive cost variances are concentrated in: PBD E, Industrial and Site Services Project (\$64M); PBD G, the Environmental Remediation Project (\$22M), and in the level-of-effort activities in PBD J, Support Project (\$39M). These are offset by the negative cost variances in PBD A, Building 371 Closure Project (\$-37M) and lesser values in PBDs B and C.

PBD A (B371), experienced an \$11M increase in its negative cost variance. This is particularly significant since activities in PBD A dominate the project's critical path. Negative cost variances are expected to persist as K-H continues to buy schedule recovery in B371. The cost variance reduction this quarter is in part due to higher costs for unplanned maintenance costs in the nuclear buildings and overruns in PuSPS operations.

# Total Project Report RFFO RFETS

2QFY02 • Jan - Mar 2003



## Schedule (Predetermined Work Activities)

**SV<sub>PWA</sub> (+\$76M, +44%)\***

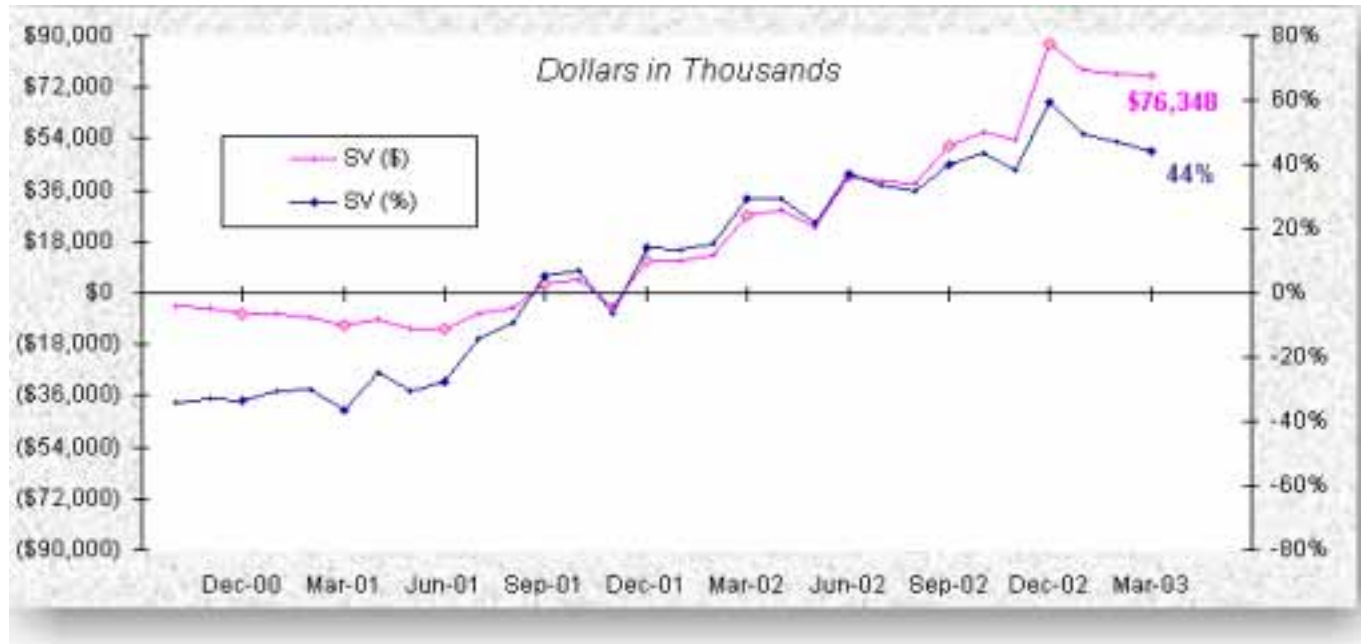
At the end of this second quarter, 15% (\$173M) of the PWA scope was scheduled for completion (lifecycle), and 22% (\$249M) of the PWA scope was actually completed. K-H completed \$14M in PWA work scope during the quarter.

Through this quarter 46% of the contract duration had elapsed (38 out of 82.5 months), and ~52% of the total project scope has been performed.

Other indicators of schedule performance include Traditional Schedule Variance, Modified Milestone Schedule variance and P3 estimated completion dates. The Traditional Schedule Variance and Modified Milestone Schedule Variance are +\$138M (+7%) and +\$135M (+26%) respectively. The P3 estimated completion date is currently several months ahead of the target date of December 15, 2006. The gain in schedule is the result of K-H's revisions to the B371 D&D schedule. RFFO continues to monitor the critical path and for the foreseeable future will continue to utilize December 15, 2006 as the estimated completion date. These other indicators are further discussed in Appendix D.

*\* These are the validated RFFO figures*

## Validated Schedule Variance on Predetermined Work Activities



K-H reported higher PWA earned value for PBDs A (\$44,501K) and F (\$45,808K).

See the relevant PBD sheets for explanations of the deltas.

## PWA Schedule Performance by PBD

(\*RFFO BCWP differs slightly from KH methodology in PBD A)

Project Description	BCWS	BCWP	SV (\$)	Change from last QTR	SV (%)	Change from last QTR	DELTA RFFO - KH BCWP**
<b>1A*</b> 371Complex	44,405	44,135	-270	Worse	0%	Same	-366
<b>1B</b> 707Complex	36,921	47,744	10,824	Better	29%	Worse	0
<b>1C</b> B771/774Closure	36,886	37,996	1,109	Worse	3%	Worse	0
<b>1D</b> B776/777Closure	22,277	43,947	21,671	Worse	97%	Worse	0
<b>1E</b> Industrial and Site Services	3,291	9,516	6,225	Same	189%	Same	0
<b>1F</b> Material Stewardship	27,164	42,767	15,603	Worse	57%	Worse	3,041
<b>1G</b> Remediation	1,631	22,818	21,187	Same	1299%	Same	0
<b>Project Totals</b>	<b>172,575</b>	<b>248,923</b>	<b>76,349</b>	<b>Worse</b>	<b>46%</b>	<b>Worse</b>	<b>3,407</b>

**\*\*All values are cumulative-to-date**



# Total Project Report RFFO RFETS

2QFY02 • Jan - Mar 2003



## Key Milestones

**CLOSURE MILESTONES:** Demolished buildings 441 (former lab and office building), 112 (former cafeteria and office space), 885 (waste storage metal building), tents 10 & 11 (stored legacy waste) and numerous other small buildings, trailers and other structures. ER completed excavation of 24% (55/225) of the 903 Pad cells, removed the 993 slab and finished field characterization at the 904 Pad.

**DNFSB MILESTONES—Plutonium Metals and Oxides** – The milestone to complete PuSPS operations was missed in May 2002. The current commitment is to complete by October 2003. PuSPS operations have been accelerated and now expect to complete by June 2003. A total of 1482 certified 3013 cans (out of a total estimate of 1950 cans) have been produced by the end of the quarter. To mitigate further schedule delays, approximately 970 kilograms of low-purity oxides have been authorized for shipment to the Waste Isolation Pilot Plant; repackaging started in December 2002 and is expected to be complete by July 2003. A total of 449 cans of low purity oxide (out of a total estimate of 1400 cans) have been produced by the end of the quarter.

**RFCA MILESTONES—RFFO Validated:** D&D (\$29.54M): Met for 2003. LLW (\$5.91M): Met for 2003. ER (\$5.52M): Met for 2003. TRU (\$.75M): Met for FY03. 2003 M5 Milestone (See Glossary) (\$35.312M): Met for 2003.

**STP MILESTONES—** RFETS has 11 STP milestones in FY2003, which specify that certain MLLW streams be sent offsite for treatment. Two milestones have been met and one-year extensions for five milestones will be requested in the April 15, 2003 Quarterly Progress Update to CDPHE. The remaining four STP milestones remain on track for completion by September 2003. See *Appendix B* for detailed discussion.

## Additional REA Information

To date, RFFO has received a total of 17 REAs requesting approximately \$44.4M (about 1% of total project cost) in upward adjustment to target cost. Ten REA's have been incorporated into the contract increasing the Target cost by \$10.2M. One New REA was submitted this quarter (Systems Engineers). A Contract Modification for the National Emergency REA is pending headquarters review.

### Potential REA's

- **National Emergency** (FY 2004-2005 costs)
- **WIPP Vent Filters**
- **SNM removal delays** ~ \$10+ million and extension of closure date.
- **Dangerous Goods Regulation** ~\$4 million : Changes per IATA/49CFR
- **All Other Potential REAs** ~\$1 million : DOE and Kaiser-Hill are working to mitigate/eliminate the impact of these smaller REAs.

**Total Potential REAs: ~\$15 million**

## KH Project Risk Report

Kaiser-Hill's 2nd quarter schedule uncertainty analysis indicates that the controlling path for overall closure remains with activities in Building 371 and subsequent Environmental Restoration (ER) activities. Preparing Special Nuclear Material (SNM) for shipping continues to comprise the early part of the critical path, and is followed by B371 D&D and Site remediation. PuSPS operations continue to be a high risk activity. Other high risk activities receiving focused management attention are wastes without a well defined disposition path – especially low level mixed waste between 10 and 100 nCi/g. (see *Appendix B*).

In summary, the project remains in a solid position to meet the target schedule and target cost provided that SNM shipping is sustained.

## 2QFY02 • Jan - Mar 2003





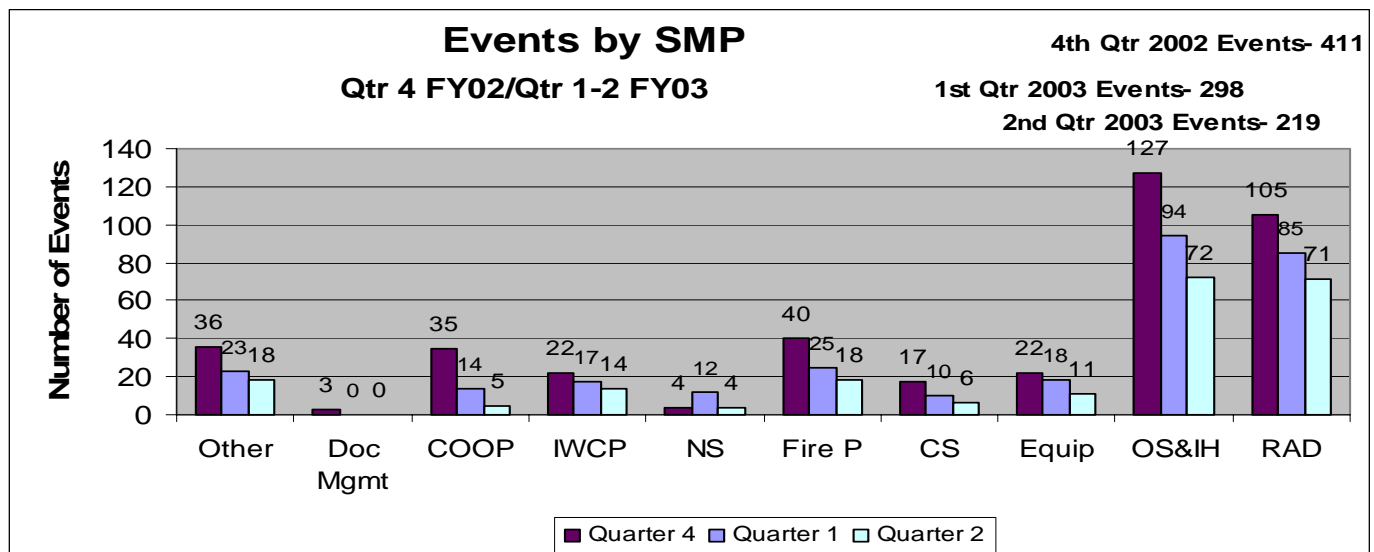
## Safety

Gary Noss x 4371

### B.6 Safety Analysis

There are no reported incidents where the B.6 safety criteria were exceeded (and contractual actions taken) during the second quarter of FY 2003.

The site-wide events identified below are representative of a wide variety of D&D activities that are analyzed in the Safety Assessment Center (SAC). Some categories of events may have a large number of incidents, but the concern level remains low due to the nature of the events. Much of this information is used as leading indicators, directing our safety program improvements.



Over the last three quarters, there has been a noticeable reduction in the number of Safety Management Program related events. No single reason is cited for this positive trend. However, there are several different reasons that are believed to contribute to this continuing trend. They include:

**Mentoring:** Mentoring has proven to be a strong enabler in improving work crew safety awareness. In particular, mentoring involvement in work package planning teams has led to better identification of job specific hazards and controls needed in the packages.

**Safety Control Index- Find It (SCI-FI):** This process is used by the contractor to perform their field inspections. Observations are reported every two weeks. The intent of the program is to abate problems on the spot, if possible. If needed, work is stopped so that issue can be resolved.

**Training:** In-depth, hands-on training has been provided in Fall Protection, Hoisting & Rigging and Scaffolding, and ongoing Toolbox Topics to improve worker safety awareness.

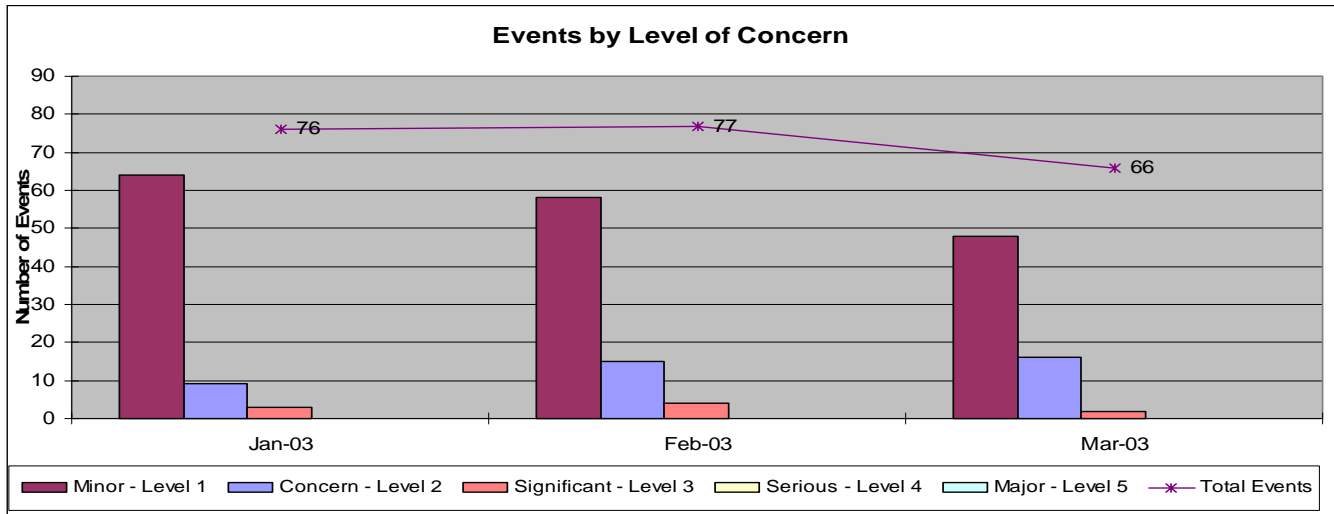
**Improved IWCPs:** A Center of Excellence was established as a forum for improving the overall quality and technical adequacy of the Integrated Work Control Program (IWCP). Increased attention on Pre-evolution Briefings, and ensuring that the same crew that plans the work does the work.

# Total Project Report RFFO RFETS

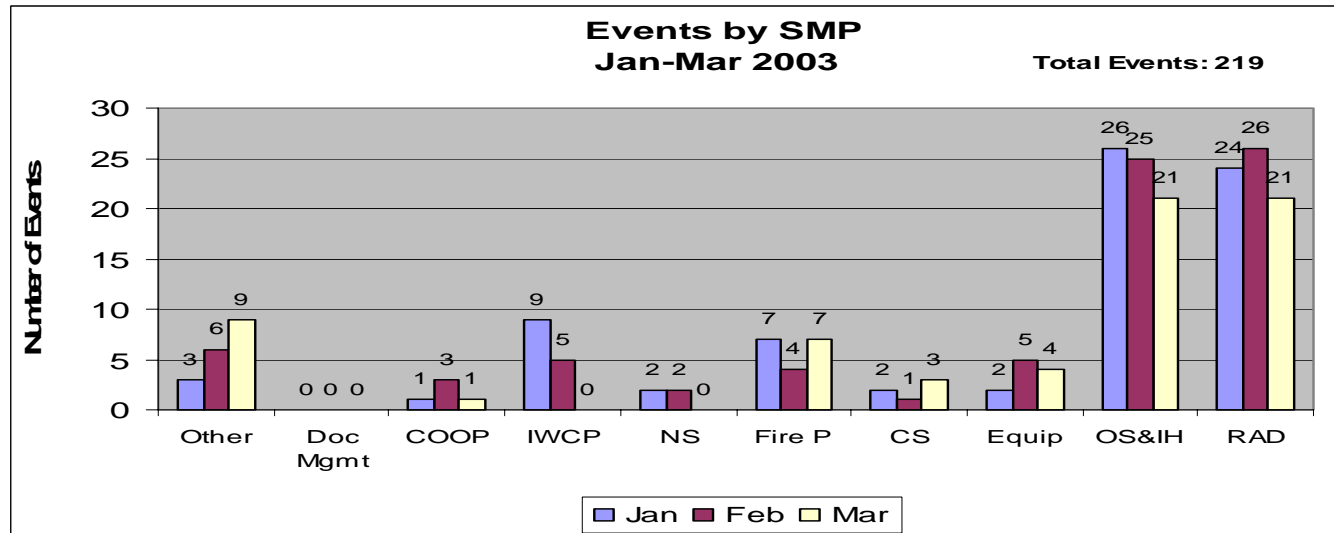
2QFY02 • Jan - Mar 2003

**Safety** CONT.

Gary Noss x 4371



Safety at the Rocky Flats Site is managed very aggressively with the intent that RF Safety Management Programs (SMPs) are responsive to identified concerns. Site-wide events are analyzed from a safety program, and the data helps direct specific improvements in an effort to improve safety at the Site. Again, some categories of events may have a seemingly large number of events, but the concern level remains low due to the nature of the events.



As described in the First "Quarterly Critical Analysis" by Kaiser-Hill Company, LLC, initiatives planned for the near future to address the increasing industrial safety risk include:

- Conduct additional OSHA safety training:
  - OSHA 500 Construction Safety
  - OSHA 10 Hour Outreach for steelworkers
  - Scaffold Training Institute course
  - Fall Protection
- Conduct Human Error Reduction Training
- Mentor small business partners in safety culture
- Analyze the National Safety Council Safety Survey results and take appropriate actions.

# Total Project Report RFFO RFETS

2QFY02 • Jan - Mar 2003



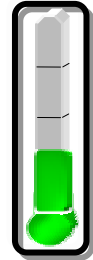
**PBD A**  
**371 Complex**  
 Fred Gerdeman x6203

BCWS <sub>LC</sub>	436,835
ACWP <sub>CUM</sub>	296,688
BCWP <sub>CUM</sub>	260,024
BCWS <sub>CUM</sub>	266,117
CV <sub>CUM</sub>	-14%
Scope Completed	60%
Cost Expended	68%

PBD A is over cost and behind schedule with a negative CV of -\$37M (-14%). Most of the Closure Project's negative CV is accumulated in this PBD. -\$54M in negative cost variance in PuSPS, Facility Mgmt, Waste Operations, and Measurements, is partially off-set by positive CV in Project Mgmt, Decommissioning, and Residues. The negative CV is not expected to be recovered, and will likely continue to increase substantially due to continued PuSPS costs, the use of surplus funds in the Wet Residues CAD to package TRU waste, decommissioning costs, and to support critical path activities.

The contractor completed \$4.6M in PWA scope this quarter, dropping the RFFO verified SV on PWAs to -\$270K (-0.6%). KH reports ~\$366K more in cumulative earned value than RFFO validated. \$350K of the delta is from a glovebox deactivation PWA that was determined to not be complete the last quarter of FY02. The rest is due to the different method the contractor uses to calculate the EV on quantity based measures, and RFFO's analysis of PuSPS output.

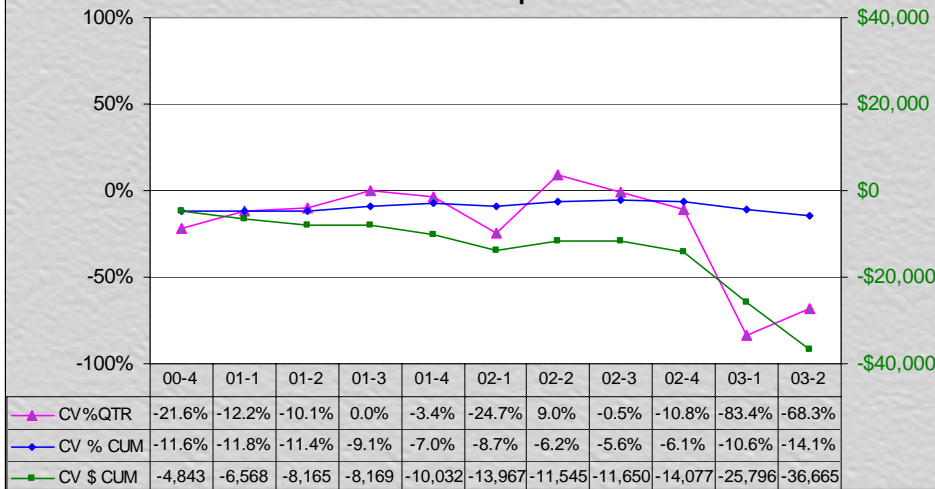
\$128M



\$44M  
34%

**PWA**  
Completion

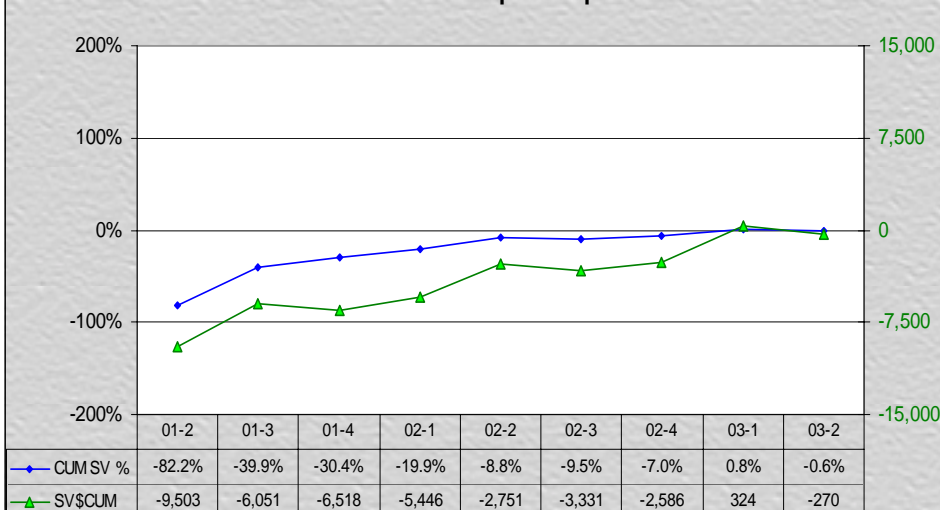
**Quarterly Cost Variance Percentage at 60% Complete**



## Accomplishments this quarter:

- SNM shipments to SRS have continued.
- Completed 6 D&D PWAs
- Initiated removal of the 1147 storage pallets from the Central Storage Vault.
- PuSPS: 1482 acceptable 3013s have been completed, certified and verified and released for shipping
- TRU waste packaging is progressing.
- All container certifications required for SNM removal have been obtained by RFFO
- Sludge disposal (liquid LLMW) from B/374 started.

**Quarterly PWA Schedule Variance at 34% PWA Scope Complete**



## Potential Impacts to Cost & Schedule:

- Spend rate concerns have resulted in the layoff of trades workers in this project. This will have at least a short-term impact and may negatively impact the project schedule.
- The contractor is assessing methods for increasing the disposition rate for storage pallet removal

## UPCOMING:

### Key Activities / Milestones / GFS/I

- Complete packaging of TRU waste.
- Approve Decommissioning BIO 4/03.
- Continue deactivation and decommissioning.
- Finish PuSPS Operations

# Total Project Report RFFO RFETS

2QFY02 • Jan - Mar 2003

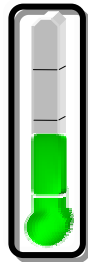


## PBD B

### 707 Complex

Gregg Nishimoto x7022

\$111M



\$48M  
43%

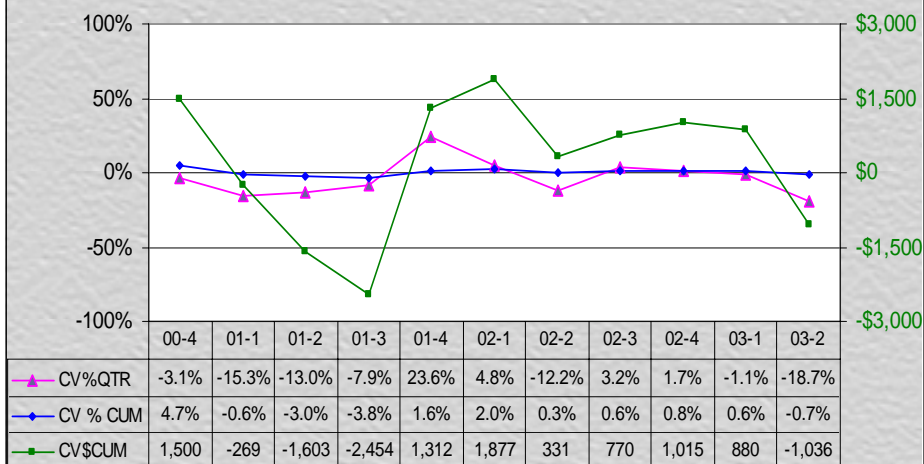
**PWA**  
Completion

BCWS <sub>LC</sub>	267,916
ACWP <sub>CUM</sub>	156,826
BCWP <sub>CUM</sub>	155,790
BCWS <sub>CUM</sub>	145,448
CV <sub>CUM</sub>	-1%
Scope Completed	58%
Cost Expended	59%

This PBD is slightly over cost and ahead of schedule. The project finished the 2nd quarter with a 7.1% schedule variance and a -0.7% cost variance. By comparison, last quarter, the project reported a 6.6% schedule variance, and a 0.6% cost variance.

A total of \$3.6 million in PWA earned value was validated this quarter. The cumulative schedule variance for Predetermined Work Activities is 29% (+\$10.8M), a slight decrease from 30% in December 2002. A total of six sets were completed this quarter.

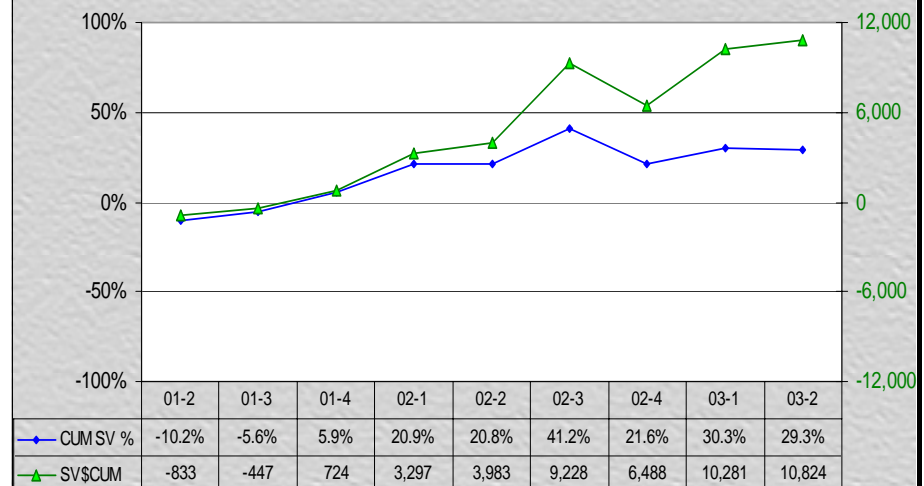
**Quarterly Cost Variance Percentage  
at 58% Complete**



#### Accomplishments this quarter:

- Six D&D sets were completed:
  - o Set B3 - Module B Glovebox 65, 75, Chainveyor Removal
  - o Set H2 - Module H Rooms 189, 190, & 191 Strip out
  - o Set J3 - Module J Glovebox 60, 65, Chainveyor, and Lepal System Removal
  - o Set T1 - External Carbon Tetrachloride Tank and Piping Removal
  - o Set 08 - Module A, B, C, and D Dry Air System Removal
  - o Set 12 - Module E, F, G, and H Dry Air System Removal
- Obtained MC&A plan exception to use higher safeguard termination limits on heavy equipment decontamination

**Quarterly PWA Schedule Variance  
at 43% PWA Scope Complete**



#### Potential Impacts to Cost & Schedule:

- None

#### UPCOMING:

Key Activities / Milestones / GFS/I

- Complete 4 D&D work sets (next 90 days)

# Total Project Report RFFO RFETS

2QFY02 • Jan - Mar 2003



**PBD C**  
**771 Complex**  
 J. Brothers x7756

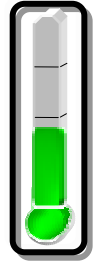
BCWS <sub>LC</sub>	<b>232,023</b>
ACWP <sub>CUM</sub>	<b>187,766</b>
BCWP <sub>CUM</sub>	<b>174,495</b>
BCWS <sub>CUM</sub>	<b>169,335</b>
CV <sub>CUM</sub>	-8%
Scope Completed	75%
Cost Expended	81%

This PBD is ahead of schedule, but over budget. With 73% of the work scheduled to date, cumulative variances show an SV of +3% and a CV of -7.6%. Most of the negative cost variance continue to be in Support Services and Maintenance (-\$18M).

The PBD has maintained positive cumulative schedule variances for the last ten months.

KH completed \$1.9M of PWA earned value this quarter, reflecting a slowdown from last quarter's gains and reducing the cumulative schedule variance by \$6.4M; it now stands at \$1.1M (+3%).

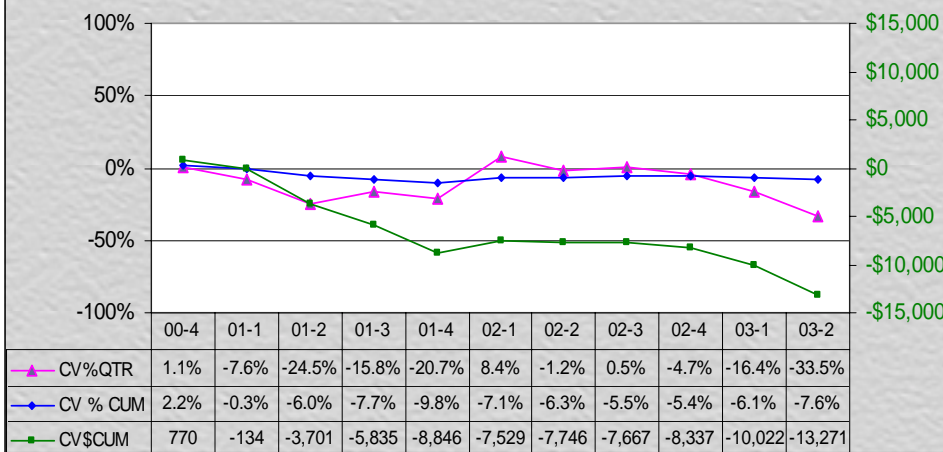
\$77M



\$38M  
49%

**PWA**  
Completion

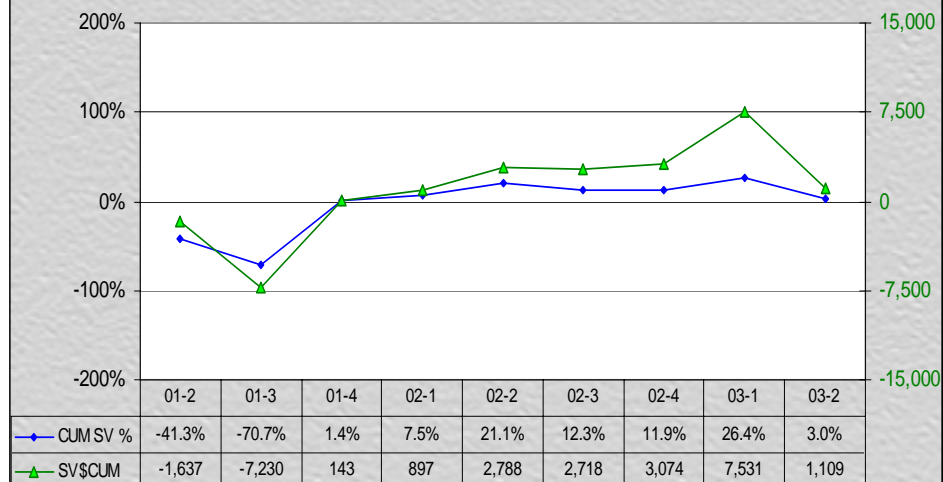
**Quarterly Cost Variance Percentage  
at 75% Complete**



## Accomplishments this quarter:

- KH completed three-Tap & Drain systems (#39, #40, #42) and one D&D workset (Set 82)
- completed the piping removal for system(s) 22 and 42.
- removed several thousand gallons of sludge from four 10K gallons tanks located in B774.
- plasma arc technology was used to size reduce 3 of the 4 tanks remaining in B774
- KH's subcontractor MACTEC began setting up the hydrolazing machine to scabble the floors and walls in B771

**Quarterly PWA Schedule Variance  
at 49% PWA Scope Complete**



## Potential Impacts to Cost & Schedule:

- None

## UPCOMING:

*Key Activities / Milestones / GFS/I*

- Remove (Set 78) Main Filter Plenum
- Complete (Set 70) 309 Tank Area
- Complete (Set 71) B771 Corridors
- B771: Declare Criticality Incredible



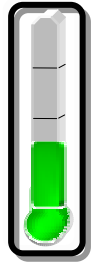
# Total Project Report RFFO RFETS

2QFY02 • Jan - Mar 2003



**PBD D**  
**776/7 Complex**  
 Gary Schuetz x3016

\$122M



\$44M  
 36%

**PWA**  
 Completion

BCWS <sub>LC</sub>	<b>268,472</b>
ACWP <sub>CUM</sub>	141,579
BCWP <sub>CUM</sub>	150,986
BCWS <sub>CUM</sub>	128,443
CV <sub>CUM</sub>	6.2%
Scope Completed	56%
Cost Expended	53%

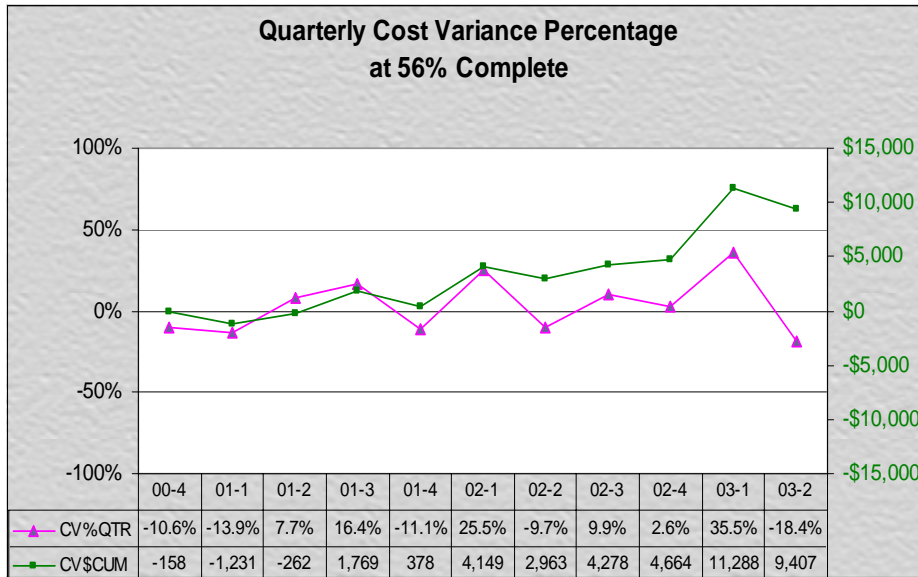
This PBD is ahead of schedule and under budget. The PBD has a schedule variance of \$22.5M (17.6%), and a CV of \$ 9.4M (6.2%).

Most of the positive SV is in Decommissioning (\$20.7M). The positive CV is mostly attributable to D&D Technology (\$9.3M).

PWAs currently have a strong positive schedule variance of 97% (\$22M), having accomplished \$133 K in PWA scope this quarter.

*NOTE: Since PWA earned value can only be claimed at completion and there are only a few, larger, PWAs left, positive PWA variance is expected to be consumed as this PBD nears close-out.*

**Quarterly Cost Variance Percentage at 56% Complete**



## Accomplishments this quarter:

- Nuclear Material removal has met threshold for removal of the Criticality Safety System.
- Completed 1 work set (Criticality Alarm System) this Quarter (6 total for FY 03)
- 74 of 84 work sets completed to date

## Potential Impacts to Cost & Schedule:

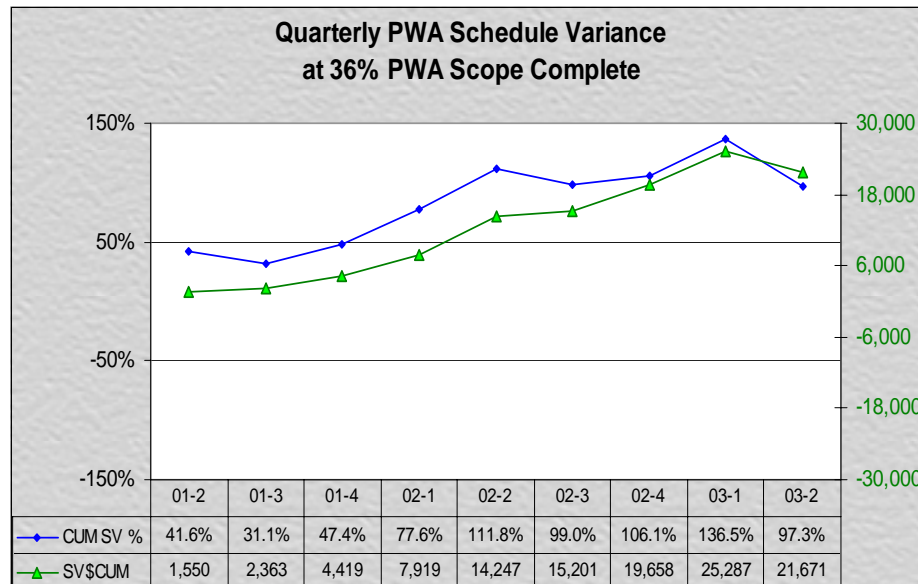
- The last remaining challenge in the baseline assumptions is the planning for building demolition

## Upcoming:

### Key Activities / Milestones / GFS/I

- The project is developing a Major Modification to the Decommissioning Operations Plan for that provides regulator approval for demolishing the contaminated facility without a confinement structure. The project is also drafting the demolition characterization plan that will also be approved by CDPHE. The Project and DOE are discussing contaminated building demolition issues with CDPHE. The target date for approval of the DOP Mod is July 2003.
- Nuclear Material removal threshold planned to be met to permit classification of Nuclear Facility Hazard Categorization 3 in 3rd quarter.

**Quarterly PWA Schedule Variance at 36% PWA Scope Complete**



# Total Project Report RFFO RFETS

2QFY02 • Jan - Mar 2003



## PBD E

### Industrial / Site Services

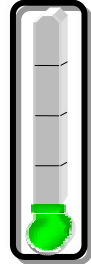
Steve Tower, x2133

BCWS <sub>LC</sub>	792,396
ACWP <sub>CUM</sub>	307,455
BCWP <sub>CUM</sub>	371,090
BCWS <sub>CUM</sub>	307,592
CV <sub>CUM</sub>	17%
Scope Completed	47%
Cost Expended	39%

The Project continues ahead of schedule and under cost. Compared to baseline, actual cost variance is 17% (\$64M), and schedule variance is 21% (\$64M).

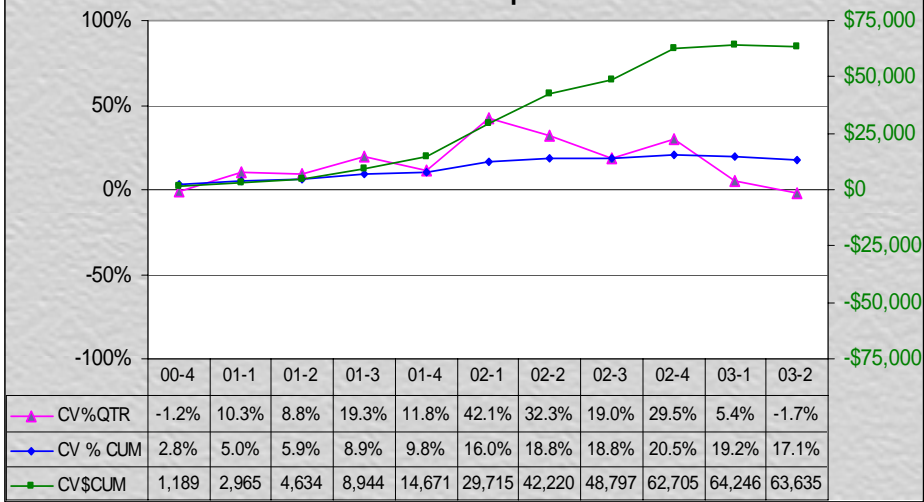
This PBD is a major contributor to the Closure Project's positive Cost Variance; 52% of the Project's positive CV at the PBD level is in this PBD. The project continues to track toward early completion and analysis shows that this project can easily finish in summer of 05 if other projects can complete their work on time. However, progress was recently slowed when the PBD E FY03 funding was reduced as a result of too high a spending rate across the Site. Buildings 881 and 883 D&D work has virtually stopped. No new PWA scope was scheduled completed this quarter in this PBD.

\$306M



\$9.5M  
3%

**Quarterly Cost Variance Percentage  
at 47% Complete**



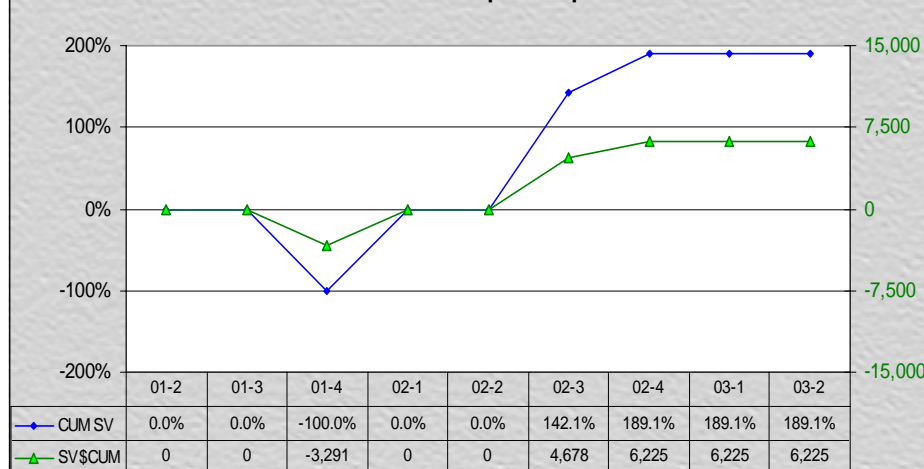
#### Accomplishments this quarter:

- Demolished Buildings 441 (former lab and office building), 112 (former cafeteria and office space), 885 (a waste storage metal building), and tents 10 & 11 (which stored legacy waste).

#### Potential Impacts to Cost & Schedule:

- The contractor's spending rate exceeded the available funding even taking into account previous cut backs. To reduce the spend rate, D&D work was virtually stopped in Buildings 881 and 883 and substantial start of Building 444 D&D has been deferred until FY04

**Quarterly PWA Schedule Variance  
at 3% PWA Scope Complete**



#### UPCOMING:

Key Activities / Milestones / GFS/I

- Buildings 866, 334, 966, 519, 553, 554, 556, and trailer 131A are likely to finish decommissioning in the next three months.

# Total Project Report RFFO RFETS

2QFY02 • Jan - Mar 2003

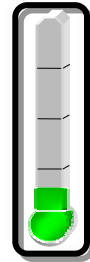


## PBD F

### Material Stewardship

Fran Geurink x4619

\$161M



\$42M  
27%

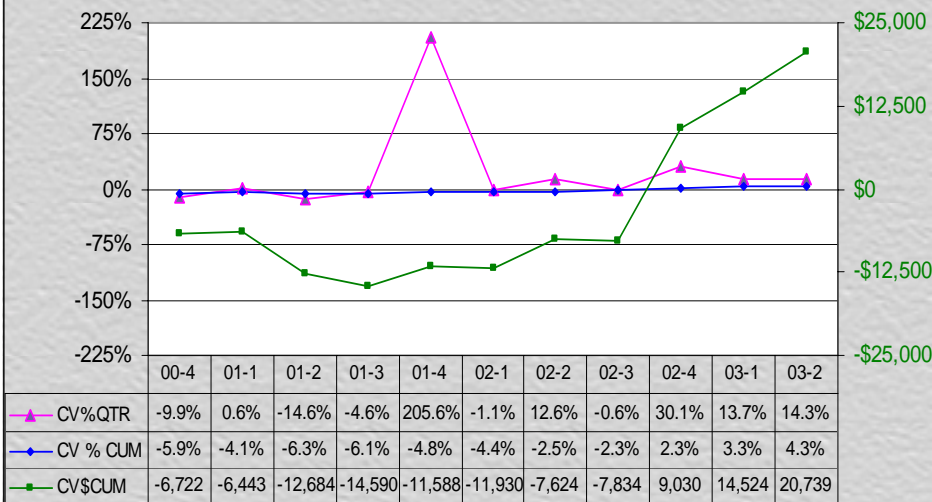
**PWA**  
Completion

BCWS <sub>LC</sub>	860,215
ACWP <sub>CUM</sub>	457,437
BCWP <sub>CUM</sub>	478,176
BCWS <sub>CUM</sub>	460,525
CV <sub>CUM</sub>	4.3%
Scope Completed	56%
Cost Expended	53%

With 54% of the work scheduled to have been completed, this PBD is under cost and ahead of schedule. The PBD has a positive cost variance of +\$21M (+4%), and a schedule variance of \$18M (4%). The positive cost variance has been impacted by an increase in Safeguards and Security costs, which will be reduced as requirements lessen.

RFFO validated \$4M in PWA scope performance this quarter, (K-H claimed \$8M) bringing the accumulated positive schedule variance to \$15.6M. The delta is due to K-H submitting a waste metric that did not qualify for earned value until 3Q FY03.

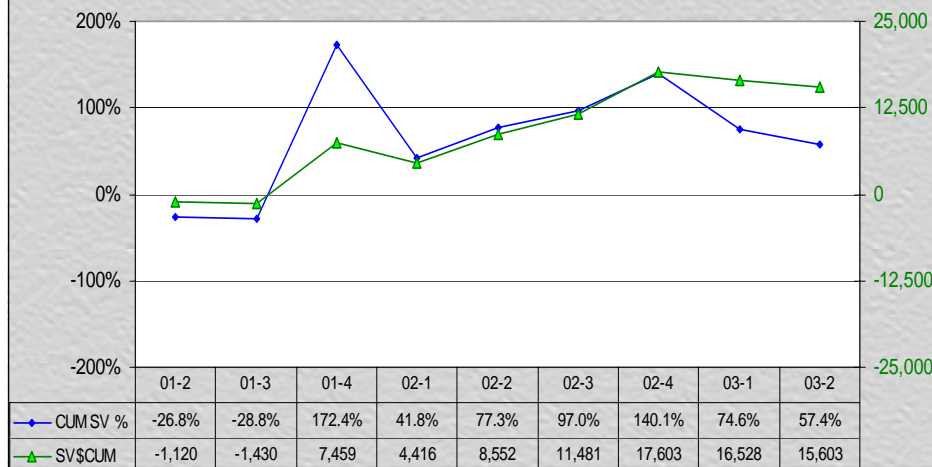
**Quarterly Cost Variance Percentage at 56% Complete**



#### Accomplishments this quarter:

- ~9,000m<sup>3</sup> of LL Waste to NTS
- ~6,000m<sup>3</sup> of LLM Waste
- ~900 m<sup>3</sup> of TRU Waste to WIPP in 146 shipments
- 15 tanks containing Solar Pond Sludge were emptied and removed; 2300+ m<sup>3</sup> through March
- Shipped approximately 15 m<sup>3</sup> of organic and PCB debris solids to the TSCA Incinerator
- Shipped 127 STP-regulated waste chemical containers to DSSI for thermal treatment
- Removed Tent No. 11 from the 904 Pad
- Completed the WIPP recertification audit

**Quarterly PWA Schedule Variance at 27% PWA Scope Complete**



#### Potential Impacts to Cost & Schedule:

- Receiver sites for LLMW (>10nCi/g)

#### UPCOMING:

*Key Activities / Milestones / GFS/I*

- Current plan is to begin shipping TRU classified Waste to WIPP in the 3<sup>rd</sup> and 4<sup>th</sup> quarter, FY03.



# Total Project Report RFFO RFETS

2QFY02 • Jan - Mar 2003

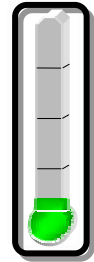


## PBD G

### Remediation

Norma Castañeda x4226

\$240M



\$23M  
10%

**PWA**  
Completion

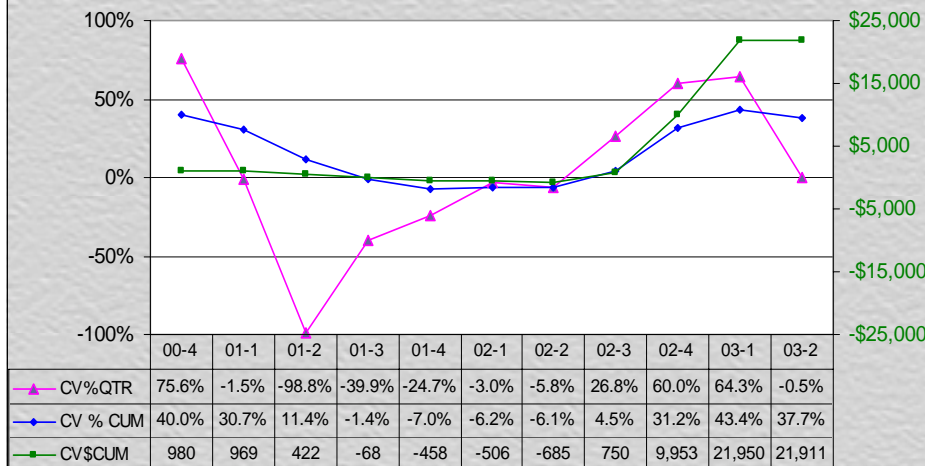
BCWS <sub>LC</sub>	295,956
ACWP <sub>CUM</sub>	36,246
BCWP <sub>CUM</sub>	58,157
BCWS <sub>CUM</sub>	33,297
CV <sub>CUM</sub>	38%
Scope Completed	20%
Cost Expended	12%

This PBD is ahead of schedule and under cost. The CV cum is at + 38% (\$22M), and the traditional SV cum is at 75% (\$25M). The main drivers for the positive variances are due to acceleration of the 903 Pad Remediation Project and Solar Ponds.

We're experiencing some project delays on Sanitary Sewer System closure (still in use), IHSS Group 500-4 (RCRA storage unit still in use), the Original Landfill (negotiating path forward), and UBC 727/779 (being utilized as a lay down yard).

No new PWA scope was accomplished this quarter.

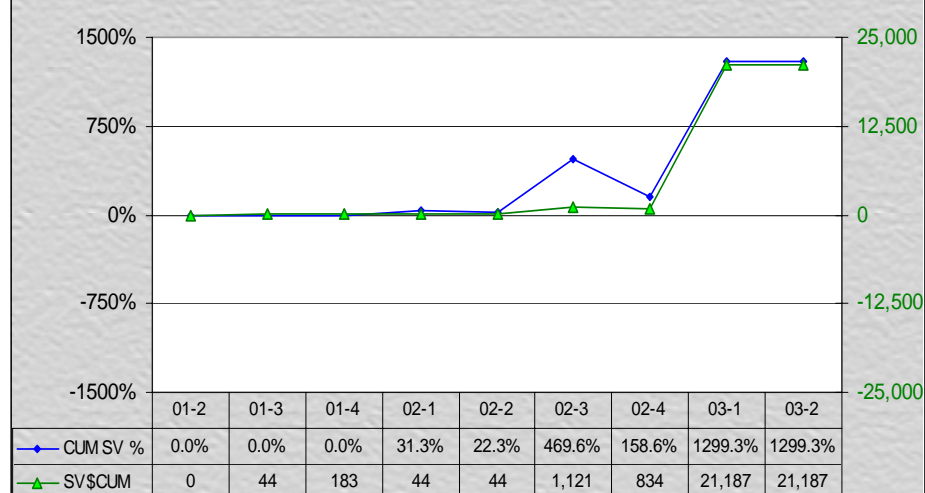
**Quarterly Cost Variance Percentage at 20% Complete**



#### Accomplishments this quarter:

- 903 Pad: 24% cell excavation (55/225)
- IHSS Grp 300-1: finished field work
- 904 Pad: finished field characterization
- B771/774 complex: finished field characterization of IHSSs
- B993: slab removal
- UBC characterization sampling: 11% for B371, and 42% for B374 complex
- IHSS 800-6: Closeout report approval
- IHSS documents approval: Groups: 300-3 (B371), 300-4 (B374), 400-8 (B441), 800-1 (B865), 900-1 (B991), & 900-3 (904 Pad)

**Quarterly PWA Schedule Variance at 10% PWA Scope Complete**



#### Potential Impacts to Cost & Schedule:

- None at this time

#### UPCOMING:

##### Key Activities / Milestones / GFS/I

- 903 Pad: Continue cell excavation
- 371/374: Continue UBC characterization:
- B441: Begin UBC remediation (April 03)
- Solar Ponds: Closeout Report Approval
- 991 tunnel: Begin sampling
- Original Landfill IM/IRA: public comment
- Prepare Phase III soil vacuum decision document, and 903 Lip Area RSOP Notification
- Gain NFA approval from agencies for Trench 7, T-4 burrito, and Ash Pits (April)
- Gain agencies' approval of Present Landfill IM/IRA Area Decon Pad

# Total Project Report RFFO RFETS

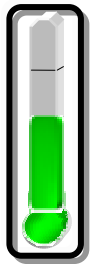
2QFY02 • Jan - Mar 2003

## PBD H

Engineering, Environmental, Safety, Health & Quality

Gary Noss x4371

\$239M



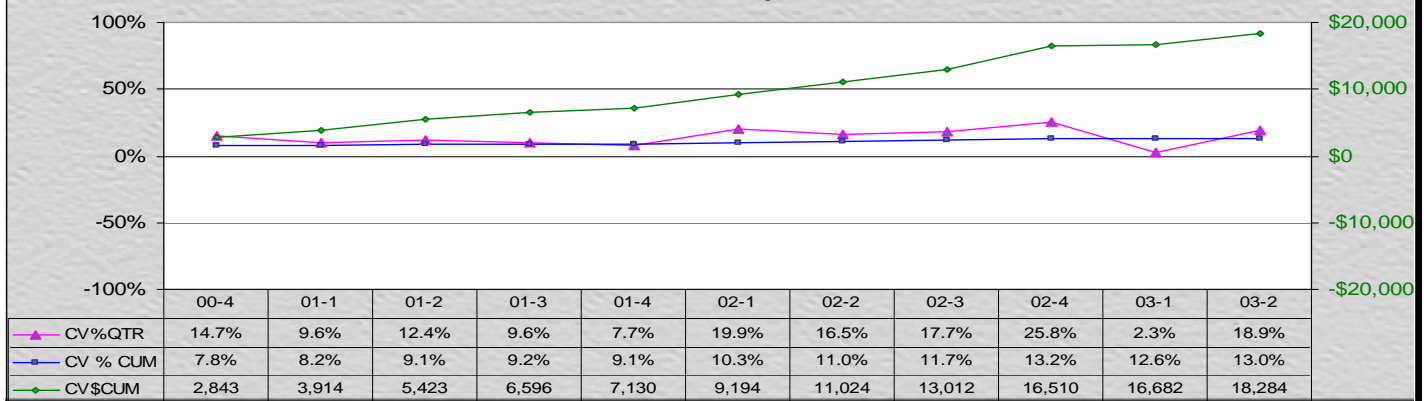
\$141M  
59%

BCWS <sub>LC</sub>	239,308
ACWP <sub>CUM</sub>	122,747
BCWP <sub>CUM</sub>	141,031
BCWS <sub>CUM</sub>	141,031
CV <sub>CUM</sub>	13%

Scope  
Completion

This level-of-effort PBD is +13% under budget (+\$18M). The contractor attributes the positive CV in this PBD in large part to staff vacancies.

Quarterly Cost Variance Percentage  
at 59% Complete



### Accomplishments this quarter:

- Documented Safety Analysis for site waste management facilities as approved by RFFO.
- Completed FY03 Annual Criticality Assessment for 707/776/777 with no significant findings.
- The Well Abandonment and Replacement Program abandoned 60 wells & well points – no new wells were installed.
- P2 program reports 78% accomplishment of FY02 Pollution Prevention goals resulting in \$77M in cost savings.
- Comment period for the proposed Rocky Flats Cleanup Agreement modification that established radioactive soil action levels and a risk based approach for sub-surface soil cleanup closed on 30 January 2003. Response to comments being prepared.
- Agreement reached w/CDPHE and EPA regarding application of new inspection and maintenance requirements in 40 CFR 61 subpart H. The new requirements will have minimal impact on the site.

### UPCOMING:

Key Activities / Milestones / GFS/I

- RFETS 101 – a consolidated 22-hour course designed to expedite qualification of new subcontractor and labor personnel should be implemented in April.
- RFCA modifications expected to be approved in May.

### Potential Impacts to Cost & Schedule:

- None.



# Total Project Report RFFO RFETS

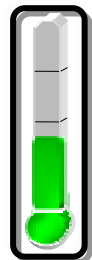
2QFY02 • Jan - Mar 2003

## PBD J

Support Project

Bob Birk x5921

\$591M



\$262M  
44%

Scope  
Completion

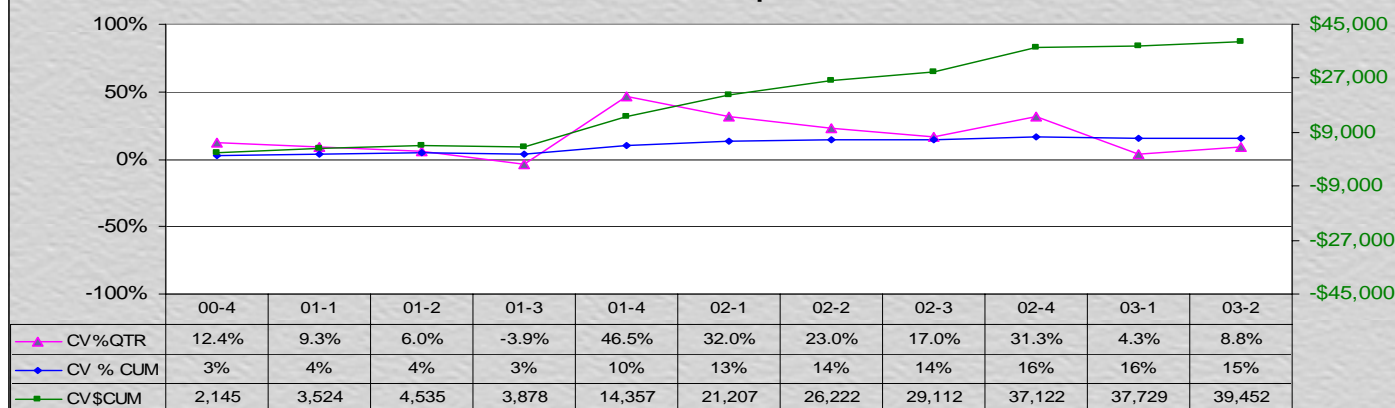
BCWS <sub>LC</sub>	590,199
ACWP <sub>CUM</sub>	222,738
BCWP <sub>CUM</sub>	262,190
BCWS <sub>CUM</sub>	262,190
CV <sub>CUM</sub>	15%

This level-of-effort PBD has completed 44% of its workscope and expended 38% of its costs. PBD J is currently 15% under cost with a cumulative CV of +\$39M.

This PBD is also a major contributor to the Closure Project's overall positive cost variance with 32% of the project's positive CV at the PBD level.

KH requested an additional \$1,492K in Workforce restructuring funds (GG08) and has received \$750K.

Quarterly Cost Variance Percentage  
at 44% Complete



### CAD Cost Analysis:

JAA – KH Executive Office was +82%, or \$14M. The positive CV is primarily due to cost risk funds held in management reserve (contingency) in this cost account, along with previous understaffing.

JAB – General Counsel & Audit was +23%, or \$1.5M. The positive CV is due to historical under staffing.

JAC – Planning and Integration cost variance was 20% or \$4.7M. The positive CV is due to periodical under staffing and reduced consulting subcontract costs.

JAE – Steelworker Overhead cost account was 25% or \$3.4M. The positive CV is due to historical difference between the budgeted amount of lump sum bonuses planned for distribution and the amount actually paid as well as lower idle/training time charges.

JAG – Fringe Benefits- was +93% or \$6.9M. The positive CV is due to a greater than planned recovery of fringe benefits costs because more labor hours were worked than originally planned. This is due to higher than anticipated use of security and steelworker overtime.

JAJ - Workforce Restructuring was +12% or \$1.9M. Cost variance is due to few layoffs occurring to date in FY03, as most layoffs are scheduled for the last two quarters of FY03.

### Accomplishments this quarter:

- Prepared and delivered the Monthly Closure Performance Report and Executive Strategy Briefing; Installation of the Nextel cellular tower near the east entrance was completed; Began implementation of the enhanced Workforce Transition Program; and Submitted Integrated End State Modification to RFFO.

### UPCOMING:

Key Activities / Milestones / GFS/I

- None

### Potential Impacts to Cost & Schedule:

- None.

# Total Project Report RFFO RFETS

---

2QFY02 • Jan - Mar 2003

## Rocky Flats Field Office

Budget: Lance Schlag x3171

### RFFO Budget

#### Performance

EW05 Budget Authority Planned \$20.8 M, Obligated through March - \$1.3 M.

FS40 Budget Authority Planned \$0.3 M, Obligated through March - \$30 K.

#### Issues/Concerns

None.

#### Upcoming Focus

RFFO is continuing to manage commitments and obligations in a manner that reduces RFFO support requirements and provides additional funding to Kaiser-Hill to accelerate closure activities. RFFO provided Kaiser-Hill \$12 M of the planned RFFO support funds in April 2003, in addition to absorbing the general rescission from within the RFFO support allocation. As of April 2003, RFFO will have provided \$16.5 M to support acceleration of site closure.

## Appendix A

POC: Greg Moore x2394

### SNM Shipping

*Update as of April 2003*

#### **Description:**

Removal of special nuclear material (SNM) is a critical activity in achieving RFETS closure schedule and cost targets. The magnitude of the uncertainties related to SNM shipping have all but been eliminated as DOE addresses the issues of shipping containers and receiver sites. Remaining key issues include:

- NONE

#### **Current Status:**

DOE guidance includes:

- Plutonium metals and oxides will be sent to SRS
- HeU will be sent to SRS
- 125 parts greater than 1000 A2 will be packaged in containers certified for these materials and shipped to SRS
- 12 special items to LLNL
- Low purity oxides will be disposed at WIPP
- Plutonium Chloride compounds can be stabilized at 750°

#### **Milestones**

- Shipments to SRS have begun.

#### **Sensitivities**

- If there are cost and schedule impacts, the contractor will request an equitable adjustment resulting in an increase to target cost and target schedule.

## Appendix B

POC: Steve Slaten x4839

Lam Xuan, x3135

### Orphan Wastes

*Update as of April 2002*

#### Issues:

- *Lack of Disposal Capability for Mixed Low-Level Waste greater than 10 nanocuries per gram*

The site currently lacks a disposal site for mixed low-level waste (MLLW) with activity levels greater than 10 nanocuries per gram (nCi/g). Two sites have been identified by the Waste Management Programmatic Environmental Impact Statement (PEIS): Hanford and the Nevada Test Site (NTS).

Hanford is not available due to ongoing efforts with the Hanford Solid Waste Program Environmental Impact Statement. The Record of Decision for this EIS is not expected until July 2003 at the earliest. NTS has submitted a permit to the State of Nevada to allow disposal of offsite MLLW. This permit is currently under review by Nevada. It is not known when this permit will be approved and disposal of Rocky Flats' MLLW could commence.

This lack of disposal capability complicates the Site's plans for treatment of MLLW with activity greater than 10 nCi/g. There are STP milestones to complete offsite shipment of approximately 1000 cubic meters of MLLW, most of it greater than 10 nCi/g. Without disposal capability, this waste will either need to be stored offsite at a commercial treatment facility at increased cost to the closure project or returned to the site after treatment, again with increased costs. Commercial facilities are also restricted by their license limits for storage of radioactive material.

Additionally, onsite storage capacity is diminishing as facilities are being decommissioned and demolished. Some of these wastes may be segregated with a subset falling below 10nCi/g or above 100nCi/g, which may then have current disposal options. As a result of this situation, RFFO is requesting milestone extensions for Solidified Bypass Sludge and B374 Wet Slurry waste streams to allow additional time for disposal options to emerge prior to treatment of these wastes.

- *TSCA Incinerator*

The Toxic Substances Control Act Incinerator (TSCAI) in Oak Ridge, Tennessee, is currently the only available facility for some RFETS wastes requiring incineration. Due to higher than expected levels of beryllium, two of the original FY02 milestones could not be met and one-year milestone extensions were approved by the Colorado Department of Public Health and Environment. These waste streams are PCB Solids and Organic Solids, Non-PCB. The waste streams were subdivided to split out the high beryllium population and the wastes meeting the TSCAI acceptance criteria were shipped for treatment in early January 2003. Treatment options are being evaluated for the remainder of these waste streams.

- *Availability of Commercial Treatment Facilities*

Some existing wastes are without an available treatment facility. For MLLW, there are several waste streams that do not have a clearly identified treatment option. These waste streams are:

- Trench T-1 remediation waste (112 cubic meters)
- PCB Solids and Organic Solids, non-PCB (12 cubic meters)
- Used Absorbents (1 cubic meter)
- Incinerator Ash (10 cubic meters)
- Waste Chemicals (~25 containers)

## Appendix B, CONT...

RFETS is working with EM-50 on the Trench T-1 waste stream and is currently performing treatability studies at a commercial vendor. The PCB/Organic Solids waste streams are relatively small and procurement packages to solicit proposals from treatment vendors are being prepared by Kaiser-Hill. The Used Absorbent and Incinerator Ash waste streams have been sampled and the site is awaiting final characterization data. Once the characterization data is reviewed, disposition options will be evaluated and procurement packages developed. Review of the Waste Chemical population revealed 18 containers that have high beryllium content and 7 containers that have EPA code F027. No commercial facilities have been identified that can treat these wastes and Kaiser-Hill is evaluating treatment options.

A milestone extension request to CDPHE will be submitted for the PCB Solids, Organic Solids, non-PCB, and Waste Chemical waste streams.

### • *TRU disposition at WIPP*

Pathways for transuranic (TRU) wastes, at one time called "orphans," have been identified. All TRU waste will be disposed at WIPP. Special characterization and transportation needs are being resolved for the following TRU wastes:

1. Legacy Solidified Organic TRU (OASIS) ~744 drums
  - Solid Core Sampling at Argonne West Lab (statistical sampling of about 36 drums of the OASIS and aqueous TRU waste populations); first shipment was completed 13 March 2003. WIPP will perform audit of Argonne West Lab the week of 19 May 2003. Argonne should receive last shipment in July 2003 if WIPP audit goes well.
  - Extended gas generation testing at Argonne West for wastes with Hydrogen Gas Generation Problem is no longer needed. RFETS is conducting the gas generation testing of all organic containers on site. For those containers failing the total gas generation testing, the site will need NRC's approval for the use of dunnage and reduced shipping time in TRUPACT-II. Expect NRC approval in Fall 2003.
2. Aqueous TRU (~1040 drums)
  - Solid Core Sampling at Argonne West Lab (statistical sampling of about 46 drums of the OASIS and aqueous TRU waste populations). *See discussion in item 1, above.*
3. Organic TRU liquids (~50drums)
  - Conduct manual coring method on site. WIPP to perform audit in July 2003. Shipping planned for FY04.
4. Disposal of Classified TRU waste at WIPP (~237 drums)
  - 146 drums without beryllium were approved by both NMED and EPA for disposal at WIPP on 3/13/03
  - 97 drums of beryllium have been approved by NRC under TRAMPACT rev. 19b on 4/14/03.
  - 21 drums of tantalums have been declared as waste for disposal at WIPP.
  - Ship to WIPP in 3<sup>rd</sup> & 4<sup>th</sup> Quarter, FY03.
5. TRU waste contaminated with PCB > 50 ppm (~9 drums)
  - EPA issued the approval decision for public review and comment which was completed by 2/28/03.
  - WIPP will submit the permit modification to NMED for approval as soon as EPA grants the formal approval. Approval expected July 2003.

### **Background:**

Orphan wastes are mixed or PCB wastes that have no current path for treatment to meet disposal site waste acceptance criteria or transportation requirements. As required by the Federal Facility Compliance Act of 1992, a Compliance Order on Consent was signed in 1995 to implement a treatment plan for those wastes in violation of the one year RCRA storage prohibition. This Site Treatment Plan (STP) describes the treatment options for each waste stream and establishes milestones on a rolling basis through negotiations with the State.



## Appendix B, CONT...

Milestones are proposed and updated in the Annual Progress Report and Quarterly Progress Update reports. Compliance with the STP is necessary to allow the site to continue storage of mixed wastes in excess of one year without being subject to fines or penalties. To date all milestones have either been met or have been extended by the State. RFETS has several mixed waste streams with milestones due in FY 2003. RFETS continues to make progress in finding treatment options for wastes.

EM-50 is providing technical support and funding to find solutions for treatment challenges.

- Teams are being created to provide technical support for: involving TRU Oasis Sludge

### **Impacts:**

1. If treatment and/or disposal facilities are not found for Low Level Mixed and TRU Mixed Waste, the waste would have to be stored at RFETS or another DOE site or at a commercial facility, after closure.
2. Lack of disposal capability may result in increased storage and/or transportation costs.
3. Request extension of STP Milestone(s) from the CDPHE if necessary.

### **Recommendations:**

Continue partnering with K-H, and work with EM-50

- T-1 Trench Material Disposition Plan
- Bypass and Wet Slurry Cake Sludge Treatment and Disposition Plan
- PCB Solid and Organic Solids, non-PCB Treatment
- Plan for Mitigation of WIPP Transportation Issues on technical assistance for problematic waste streams.
- Brief manager monthly on status of Orphan Wastes.

# Total Project Report RFFO RFETS

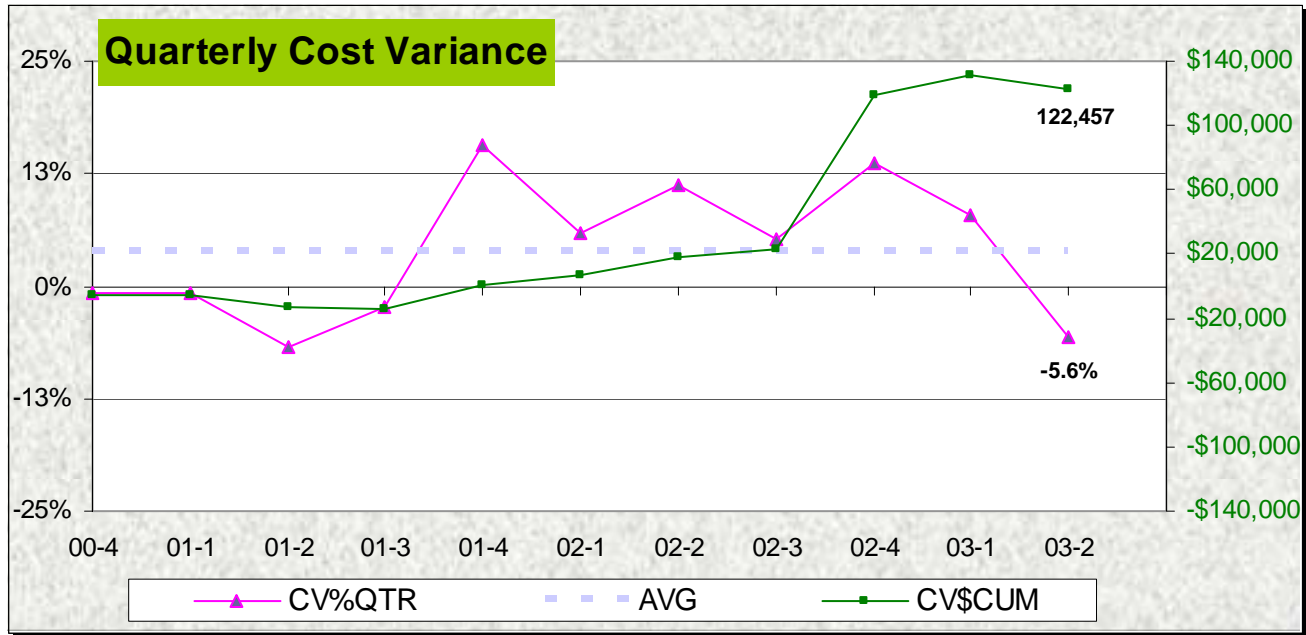
2QFY02 • Jan - Mar 2003

## Appendix C

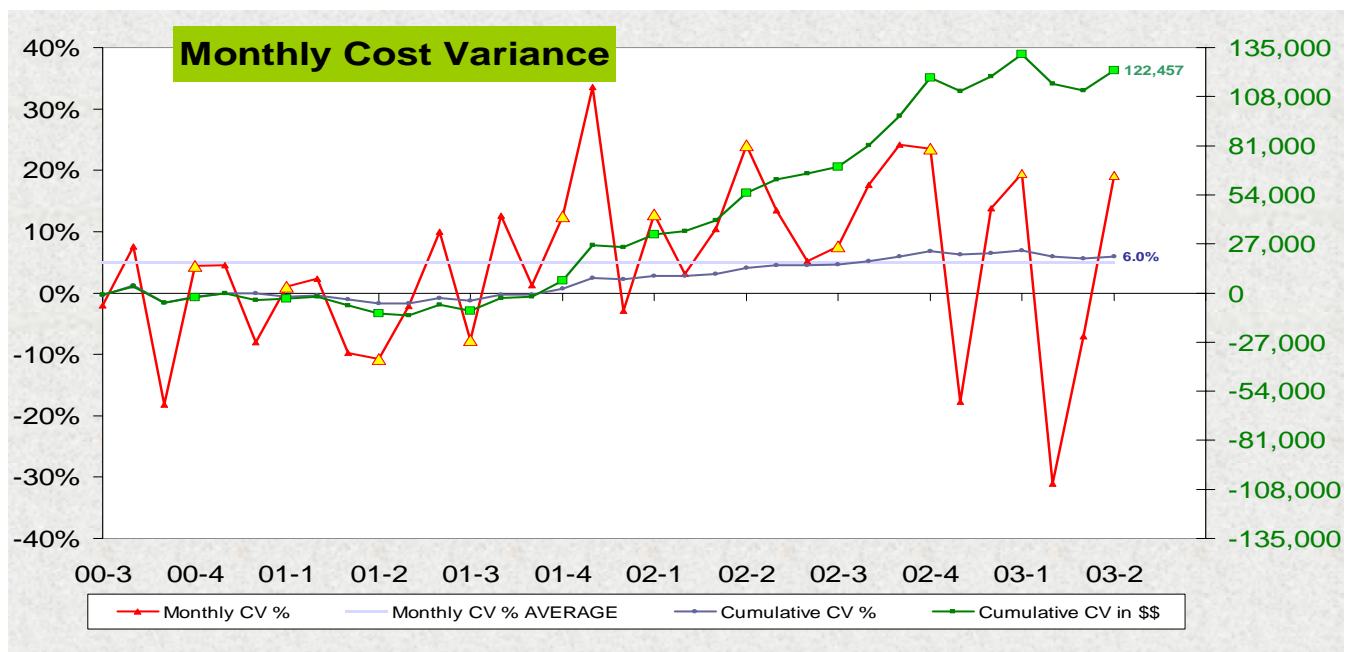
### Cost Variance Trending

The following charts depict Project cost variance trends by quarter and monthly as referenced in the Cost section of the Executive Summary.

#### Quarterly CV



#### Monthly CV



# Total Project Report RFFO RFETS

2QFY02 • Jan - Mar 2003

## Appendix D

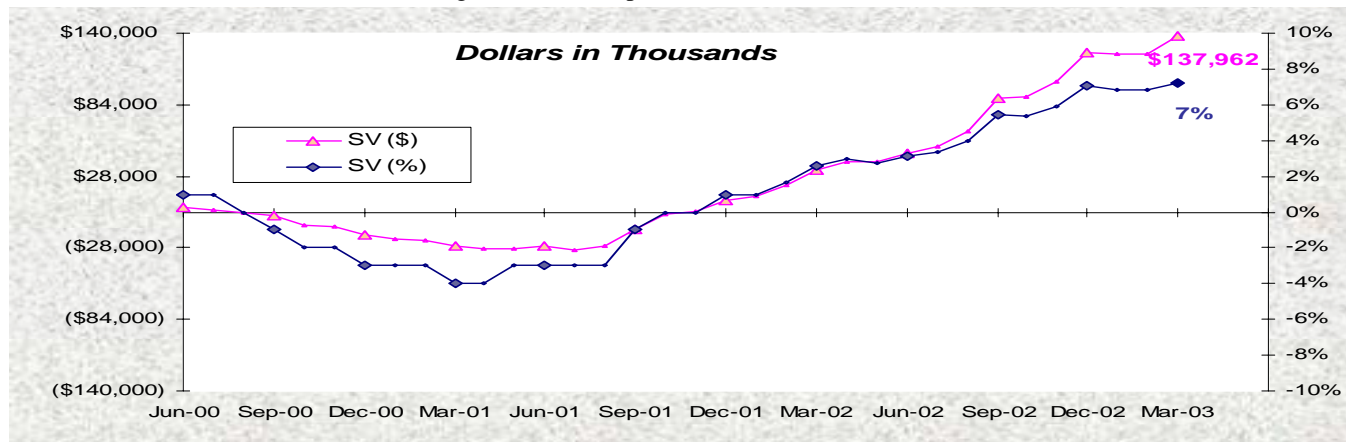
### Other Schedule Performance Indicators

The following charts depict Project schedule variance metrics used to evaluate K-H schedule performance as referenced in the Schedule section of the Executive Summary.

#### Traditional Schedule Variance

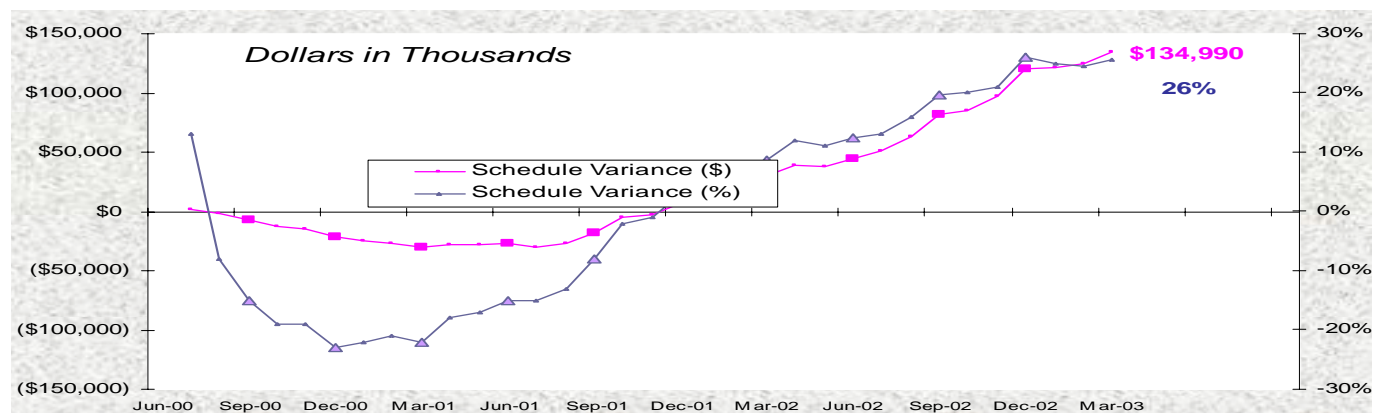
SV\$: +\$138M SV%: +7%

Traditional Schedule Variance (SV) for target activities improved from \$125M and 7% in December.



#### Modified Milestone Schedule Variance

SV\$: +\$135M SV%: +26%



The current Budgeted Cost of Work Scheduled (BCWS) for these modified milestone activities is \$527M, and the life cycle BCWS for these activities is \$1.6 billion (B). The Modified Milestone SV improved \$16M since December. The change in this indicator is due mostly to additional improvement in the positive schedule performance of the Industrial and Site Services Project, and to the improvements in the Material Stewardship and the Remediation projects which have both pulled out of their negative schedule variances. About 33% of the modified milestone activities were scheduled to be complete at the end of this quarter, and 42% were completed.

# Total Project Report RFFO RFETS

2QFY02 • Jan - Mar 2003

## Appendix D CONTINUED

### P3 Completion

**Estimated Completion Date:** 15 December 2006

The *K-H generated* Estimated Completion Dates (ECDs) from the P3 schedule are represented below.

K-H continues to examine critical path activities to identify schedule acceleration opportunities. RFFO is monitoring this critical path and will continue to utilize December 15, 2006 as the Estimated Completion Date.

PBD	Activity Description	Baseline Early Finish	Statused Early Finish
A	B371	11-Oct-06	23-May-06
B	B707	13-Mar-06	08-Dec-05
C	B771/774	18-Aug-04	22-Jul-04
D	B776/777	31-Oct-06	24-Oct-05
E	Industrial Sites	11-Oct-06	24-Jan-06
F	Material Stew.	13-Dec-06	04-May-06
G	ER	14-Dec-06	23-Jun-06
<b>ALL</b>		<b>14-Dec-06</b>	<b>23-Jun-06*</b>

\* Under RFFO Review

### Comparative Schedule Metrics

The project-level positive schedule variances reflect the contractor's continued success at accelerating workscope. However, the majority of accelerated activities have been in PBDs D, E, and G that are not on the Critical Path. A comparative review of schedule performance indicators continues to indicate that positive schedule metrics in the Building 776 Closure Project (PBD D), the Industrial and Site Services Project (PBD E) and Environmental Remediation (PBD G) still mask negative schedule metrics in the Building 371 Complex Project (PBD A) caused in part by delays in PuSPS operations, composite preparation and SNM removal.

K-H's critical path revisions in September and March have resulted in some projected early finish dates for the individual Projects. DOE is still reviewing the K-H changes and will utilize December 15, 2006 as the estimated completion date for the Total Project until the review is complete.

Project	SV <sub>TRAD</sub>	SV <sub>PWA</sub>	SV <sub>MM</sub>	SV <sub>P3 +/- Days</sub>
1A 371 Complex Project	-2%	* -1%	-6%	88
1B 707 Complex Project	7%	29%	19%	58
1C B771/774 Closure Project	3%	3%	6%	19
1D B776/777 Closure Project	18%	97%	43%	233
1E Industrial and Site Services Project	21%	189%	82%	164
1F Material Stewardship Project	4%	* 57%	15%	139
1G Environmental Remediation	75%	1299%	84%	108
<b>Total Project:</b>	<b>7%</b>	<b>44%</b>	<b>26%</b>	<b>108 **</b>

\*The RFFO Validated Percentages differ from the KH reports

\*\* Under RFFO Review

# Total Project Report RFFO RFETS

2QFY02 • Jan - Mar 2003

## Project Metrics

Project Metric	Life Cycle <sup>1</sup> Planned	Actuals to Date	% LC Complete	Actuals for Month	Actuals this FY	FY Plan (CPB) this FY	FY Plan (AWA)
Low Level Waste Disposed (m <sup>3</sup> )	184,475	66,486	36%	2,826	18,946	36,637	37,000
Low Level Mixed Waste Disposed (m <sup>3</sup> )	44,614	11,921	27%	2,094	8,632	3,151	8,700
TRU Waste Disposed (m <sup>3</sup> )	12,355	5,898	47%	212	1,850	3,144	3,000
Certified 3013 Containers Produced	1,950	1,482	87%	140	498	0	716
B371 Project Work Sets	60	13 <sup>4</sup>	22%	2	7	9	14
B707 Project Work Sets	98	50	51%	6	15	17	17
B771 Project Work Sets	106	69	65%	0	9	13	15
B776 Project Work Sets	82	72	88%	1	6	17	13
Facilities Demolished	290 <sup>2</sup>	103 <sup>3</sup>	36%	3	23 <sup>3</sup>	6	43
Release Sites Cleaned Up	121	35	29%	0	5	9	9
Gloveboxes removed	1,324	927	70%	20	173	306	403

<sup>1</sup> "Life Cycle" based on Closure Project Baseline metrics and New Corporate Performance Measures

<sup>2</sup> Based on current IPABS data, subject to change

<sup>3</sup> IPABS reconciliation and adjustment for the 429 Process Waste Pit that was closed on January 22, 2003, but not recorded at that time.

<sup>4</sup> Adjusted for RFFO validation of completed Workslope



## Key Definitions / Terms

### **Rocky Flats' schedule performance indicators:**

All indicators (except P3) use the standard formula  $SV = BCWP - BCWS$  and are measured in dollars, not time. Performance is measured against the Life-Cycle Baseline as presented in June 2000 with minimal adjustments approved through our rigorous Change Control Process. The indicators defined below differ mainly in which budgeted costs are included in the analysis.

**Traditional Schedule Variance ( $SV_{TRAD}$ ):** This indicator addresses schedule performance compared to plan for the entire project contracted with Kaiser-Hill. It includes all "Target" costs as defined by the contract (EW05, EW02, FS40, GG08, YN01, and NN61). It does NOT include budgeted costs for things like performance fee, technology deployment, and program (RFFO) funds. A positive variance means that, compared to the original plan, more work was accomplished than planned. A negative variance means that less work has been accomplished than planned.

**Modified Milestone Schedule Variance ( $SV_{MM}$ ):** This schedule performance indicator is designed to focus on all the 'real' work at the site. It removes level-of-effort activities from the analysis, but adds the Technology Deployment budget. Again, the variance indicates that more work or less work was accomplished than planned.

**Predetermined Work Activities Schedule Variance ( $SV_{PWA}$ ):** In order to best assure that the government is awarding performance fee for the accomplishment and acceleration of the most important work at Rocky Flats, our contract with Kaiser-Hill includes a list and schedule of ~900 "Predetermined Work Activities" against which performance is measured and provisional fee is paid. Generally,  $SV_{PWA}$  calculations allow for earning value only when an activity is 100% complete (all or none), unless the activity is a quantity-based measure. These activities represent critical work necessary to the timely closure of the Site, and performance is measured against the baseline schedule set out at the beginning of the contract. Although the contractor is free to realign specific work activities as they see fit, the dollar amount of work accomplished against these critical activities is expected to remain on plan to facilitate timely closure of the site.

**Primavera Project Planner Schedule Variance ( $SV_{P3}$ ):** In contrast with the previous indicators, the P3 schedule variance is measured in units of time (days). The Primavera project scheduling software computes the longest (critical) path through the contractual work on the Project and arrives at the Statused Early Finish, (a.k.a. Estimated Completion Date). Variance is measured against the Baseline Early Finish as established in June 2000.

**Orphans – Low Level Mixed Waste Orphans.** Wastes which must be removed from the Site but for which no disposal / treatment path has been identified and/or approved.

**D&D – Deactivation and Decommissioning.** Deactivation: the process of placing a "building" in a safe and stable condition. Decommissioning: All activities that occur after deactivation. Includes decontamination and dismantlement /demolition.

**M5 - RFCA Earned Value Aggregate (over 50%) Milestone.** Fiscal Milestones M1 – M4 require that 50% of the FYBCWS in each individual category be completed in that fiscal year. The FY M5 Milestone tracks the dollar value of the remaining BCWS in those categories for the fiscal year and requires that it be completed before the end of the *following* fiscal year. The M5 Earned Value Milestone can be satisfied with any combination of BCWP from LLW, D&D, ER, and TRU. However, the M5 milestone must be completed for each fiscal year before BCWP can be applied to Milestones M1 – M4 in the following year.

**PBD A – 371 Complex Project.** Liquid waste ops, Plutonium Stabilization & Packaging System (PuSPS), repackaging of residues, SNM removal (including shipping), and D&D. Building demolition by October 11, 2006.

**PBD B – 707 Complex Project.** SNM holdup removal, consolidation of SNM into B371, classified matter removal, and D&D. Building demolition by 3/1/06.

**PBD C – 771 Complex Project.** Complex D&D and D&D Programs (site decommissioning program and EM-50 funded projects). Building demolition by 8/04/04.

**PBD D – 776 Complex Project.** D&D. Building demolition by 10/27/05. Removal of the slab/foundation by 4/26/06 and project completion by 10/31/06.

**PBD E – Industrial / Site Services Project.** The industrial and site services portion of the RISS Project, and other bldg D&D.

**PBD F – Material Stewardship Project.** Technical program direction and operational support for commodities, engineered services, procurement, traffic & transportation, and disposition of waste.

**PBD G – Remediation Project.** The Environmental Restoration (ER) Program portion of the RISS project. The overall scope includes Industrial Area and Buffer Zone Closure and environmental restoration including any remaining characterization.

**PBD H – Engineering, Environmental, Safety, Quality, and Health.** Infrastructure. Includes; project management, assessment, oversight, regulatory compliance and monitoring, waste certification, technical training, Nuclear Safety and Licensing, Criticality Safety, Fire Protection, Engineering, Safety/Work Control, and Radiological Protection.

**PBD J – Support Project.** General Counsel & Audit (GC&A), Strategic Planning & Integration, Administration, and K-H Executive Office.